



The Regional Biomass Energy Program (RBEP) promotes increased production and use of bioenergy resources, and helps advance the use of renewable biomass feedstocks and technologies. Historically, the RBEP leverages two nonfederal dollars for every federal dollar it administers.

Benefits of Recycling Wood Waste

- **Reduces material going to landfills by more than 2 million tons each year**
- **Conserves wood resources that can be used to generate energy**
- **Reduces greenhouse gas production**
- **Creates new industries and job opportunities**
- **Saves companies money**

“Energy is one of the highest costs for companies doing business. Energy conservation makes sense to industry because it saves money.”

Thomas Adams, Ph.D., P.E.
Engineering Outreach Coordinator
The University of Georgia



U.S. Department of Energy
Regional Biomass Energy Program

www.ott.doe.gov/rbep

ANOTHER RBEP SUCCESS: Putting wood waste to work in Georgia

CHALLENGE

The wood products and forestry industries in Georgia generate more than 2 million tons of unused wood waste every year, most of which ends up in landfills. At a minimum cost of \$15 dollars per ton, landfilling wood waste is an expensive practice that can be avoided, since wood waste products can now be put to better uses.

RBEP SOLUTION

The U.S. Department of Energy's Regional Biomass Energy Program helped fund research on the scope of wood waste production and potential for its consumption throughout the state of Georgia. Home to a significant wood products industry, the state appeared to be a good candidate for turning waste into a valuable biomass resource. Working together with the Georgia Forestry Commission and the Georgia Environmental Partnership, the engineering faculty at the University of Georgia conducted extensive interviews with business representatives to assemble a comprehensive database of the state's wood waste marketplace.



Wood waste compost production
(Photos courtesy of Engineering Outreach Program, The University of Georgia)

On average, wood waste has a heating value of between 4,500 and 9,000 BTUs per pound (depending on moisture content), for less than a penny per pound. Renewable biomass fuel sources such as wood could easily provide upwards of 20% of the energy needed in the U.S. — the equivalent of what is currently produced by nuclear power plants today.*

Cost aside, using biomass for fuel is a proven method of decreasing net carbon dioxide emissions accumulating in the atmosphere. In addition, burning wood waste for energy produces fewer nitrates and sulfur compounds when compared to fossil fuels.

* Source: American Bioenergy Association

Partners

U.S. Department of Energy
Regional Biomass Energy Program
The University of Georgia
Georgia Environmental Partnership
Georgia Department of Natural
Resources, Pollution Prevention
Assistance Division
Georgia Forestry Commission



Web-based Biomass Information Resources

U.S. Department of Energy, Office of Energy
Efficiency and Renewable Energy (EREN)

<http://www.eren.doe.gov>

EREN information on bioenergy from
wood residue

[http://www.eren.doe.gov/biopower/
feedstocks/fe_wood.htm](http://www.eren.doe.gov/biopower/feedstocks/fe_wood.htm)

Bioenergy Information Network

<http://bioenergy.ornl.gov>

Biomass Resource Information Clearinghouse

<http://rredc.nrel.gov/biomass>

Biomass Research and Development Initiative

<http://www.bioproducts-bioenergy.gov>

American Bioenergy Association

<http://www.biomass.org>

RESULTS

Once the database of wood waste producers and consumers was complete, project coordinators organized a stakeholders' conference to inform government officials and industry representatives about this potential energy and manufacturing resource. Subsequent efforts have focused on conducting site-specific outreach visits throughout the state to promote using wood waste for energy generation and other industrial uses.

Since the creation of the database, several companies have expressed an interest in, or are in various stages of, building facilities in Georgia that use wood waste to generate energy for manufacturing and other industrial uses.

BENEFITS

By bringing together producers and consumers of wood waste, Georgia is demonstrating that state agencies, industry, and educators can work together to decrease net energy use, reduce greenhouse gases, create jobs, and save money.



Examples of wood waste

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